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MAJOR POWER CONFLICT EXCHANGES IN THE SIXTIES: A TRIADIC ANALYSIS OF THE UNITED STATES, SOVIET, AND CHINESE SUB-SYSTEM FROM A COMPARATIVE FOREIGN POLICY VIEW

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13. ABSTRACT

Increasingly observers have come to recognize the importance of examining the effects of third parties on the behavioral exchanges between two nations. No where is this more clearly evidenced than in the case of the relations between the United States, the Soviet Union, and China. The attempt is thus made in this paper to ascertain the impact of each of the dyadic exchanges among these three nations on the other behavioral exchanges in the triadic subsystem they form. The findings of the study clearly show that when considering the exchanges between any two of these nations, policy makers must also consider what is happening in the other parts of the triad. These third party exchanges are found to add considerably to the explanation of specific strategies employed by the three nations.

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Introduction

The period since World War II has been well established as a cold war era in which the Soviet Union and the United States were the major competitors for world dominance. More recently established, but growing in acceptance, has been the recognition of a triadic relationship with the Chinese ascending to a major role in the international arena. With this ascendency, it has become increasingly important to seek insights into the foreign policy linkages between these three major antagonists of the cold war. To this end, the conflict exchanges between all three nations are analyzed in this study. In particular, this paper views foreign policy exchanges in a dyadic fashion, but seeks to ascertain the impact upon each of the dyadic exchanges of other behavioral exchanges in the triangle. To accomplish this task, a distinction will be made between the direct effect of the target nation and the indirect effect of other dyads in the triangle upon the choice of an actor's behavior.

The Seeds of Conflict

All great conflicts gather a momentum of their own which persists and grows even after the causes that initially provoked the conflict have abated, if not ceased; the cold war is no exception. Several events which occurred following the Second World War can be suggested as having influenced the trend in conflict exchanges between China, the Soviet Union, and the United States. Included among these would be the Berlin blockade, the Korean invasion, the first Soviet detonation of a nuclear device, the accession to power by the Chinese Communists, and the Vietnam conflicts.

A great fear for U. S. strategists, evident since World War II, has been

that a hostile power or combination of powers might succeed in uniting Eurasia and turning its vast resources against the West. In this light, the association of the word "conflict" with the Soviet Union represents an almost visceral response for many Americans, accustomed as they are to the rhetoric of the cold war. The United States seems to have initially placed the Soviet Union in the role of the main perpetrator of world-wide revolutionary activity and of the leading member of an Eurasian alliance with China. More recent events have led to a major re-evaluation of this view, however (Kaplan, 1970; Morris, 1968; Zimmerman, 1971).

The Soviet Union has also faced the post-World War II period with a series of reassessments of its policies, stemming from several major events: the launching of the first Sputnik and the related development of ICBM's, the rapid development of American ICBM's, the Cuban Missile Crisis, and the Sino-Soviet-split. Various combinations of these events have been used to explain Soviet relations with the United States (Aspaturian, 1968; Dinerstein, 1968, Lowenthal, 1968b; Zimmerman, 1968, 1969, 1971).

The relations between the United States and the Chinese People's Republic have been relatively consistent throughout this period. Until very recently, Sino-American relations have been characterized by an atmosphere of intense hostility and rivalry between these two nations. The foundation of these relations was set in the early years of the Chinese Communist state with three major confrontations experienced by China and the United States; the first was in Korea. It was followed by the crises in the Formosa Straits and finally by the conflict in the former French colonies of Indo-China (Friedman, 1971, Halperin, 1965; Lowenthal, 1968a).

Several major events have marked Sino-Soviet relations in much the same way the relations between the United States and China were affected. Relations between these two great Communist nations seem to have initially been cast in terms of an alliance against the encircling capitalist nations, with the Soviets as the guiding member. But several events have led to a dissolution of this alliance and the development of a mutual view of one another as a serious obstacle to the interests of the other. Chinese initiatives towards the "Third World": beginning with the first Bandung conference, the Soviet refusal to help the Chinese in the Quemoy-Matsu crises of 1958, and the Soviet support of India in the 1962 Sino-Indian border crisis all underscore an increasingly conflictual relationship between the Soviet Union and the Chinese People's Republic (Dinerstein, 1971; Lowenthal, 1968a; Tsou, 1965; Zagoria, 1968).

The post-World War II period of relationships between these three nations clearly suggests that these three world powers have been engaged in a series of conflict of interest and tests of will or determination. More subtly, the events of the past two decades seem to suggest that the actions between the two nations in a given dyad are not lost on each other. That is, the actions of any two opponents, toward each other or toward the third actor, appear to have important implications for the relations of the third actor to either opponent. Thus, Soviet-American relations may very well affect China's relations with both the Soviet Union and the United States. The efforts by the Soviet Union and the United States to reach an accommodation, for example, have been suggested as a principle reason for the increased hostility in Sino-Soviet relations (Aspaturian, 1968; Lowenthal, 1968a; Tsou, 1965). In addition, China's rise in political importance prevents the United States from treating the Soviet Union as the sole enemy precisely

because the United States cannot act as though the danger comes only from actual military capabilities (Hoffman, 1968). For similar reasons, the Soviet Union must be restrained in its efforts to reach a rapprochement with the United States for fear of losing out to the Chinese in the struggle for influence in the Third World. The linkage between these three nations is demonstrated in the following remarks by Herbert Dinerstein:

> A useful definition of cold war is a state in which opponents who differ ideologically expect tension to mount steadily and possibly culminate in war. When tension waxes and wanes and rapprochement and detente are conceivable, "cold war" no longer describes the situation. This definition of cold war applies equally well to Sino-American and to Sino-Soviet relations. Sino-American relations are very limited at present and may continue so, but the general expectation is that they will improve somewhat, not that they will inexorably worsen. The Soviet Union fears modest improvements because only old-fashioned cold war between the United States and China can force the Chinese back into the same relationship with the Soviet Union that obtained during and immediately after the Korean war. Active U.S.-Chinese hostility obviously pushes the Chinese toward rapprochement. Distant, if not friendly, relations with the United States either make it unnecessary for the Chinese to accept Soviet terms or permit them to bargain on a better basis. As the familiar binding elements of alliances, the common enemy, becomes effaced, a possible Sino-Soviet rapprochement has to be on a different basis. If one assumes that the Vietnamese war will end and that some moderate regularization of Sino-American relations will occur, then it is difficult to posit the restoration of the status quo ante in Sino-Soviet relations. (Dinerstein, 1971, p.95).

In this paper, the exchanges between these three nations are thus analyzed in an attempt to discover just how closely interlocked are the behaviors between them.

Foreign Policy Linkages in Complex Systems

The rationale for this analysis of the interlocking of the relations between China, the Soviet Union , and the United States can be developed in more abstract and formal terms. It is an accepted truism today that the world is getting smaller, that events in remote parts of the world have an intimate

bearing upon one another. Political units which at one time were autonomous are no longer so today. The geographical and legal boundaries between nations do not pose the great barriers they once did. International relations theorists have not been slow to recognize the impact of international interactions on national autonomy. Boulding (1962) notes that the legal boundary of a nation may no longer be the most salient for research purposes. Demonstrating various relations between pairs of nations, Boulding cites the example in which power has increased to the extent that each nation is capable of destroying the other nation at long distances, but without being able to prevent its own destruction. When this point is reached, each nation continues to exist only with the permission of the other. Boulding has coined a term for this condition: "conditional viability". Closely related to this concept is the concept of "permeability" suggested by John Herz (1957, 1959). Specifically, Herz suggests that the territorial boundaries of a nation are more permeable today then they have ever been. That is to say, external influences are able to move through national boundaries and to affect the decision-making within that state more easily than ever before. However, "...systematic conceptual exploration of the flow of influence across the changing boundaries of national and international systems has yet to be undertaken and is long overdue." (Rosenau, 1969, p.3). The present study represents, in part, the development of a technique for taking account of these influcences. To accomplish this goal we introduce the concept of "autonomy."

The question that arises here is: are the actions of the three major conflictual participants in the international system to be treated as autonomous or as linked to each other's activity? If two nations are autonomous,

then in Deutsch's graphic terms, ". . . when Mr. Leonid Brezhnev (and before him Mr.Khrushchev) is itching, the Chinese are not scratching, or are scratching their own place." (1966, P. 5). If the two systems are not autonomous, then it is impossible to understand the actions of one without reference to the actions of the other, and in Deutsch's terminology, when Brezhnev itches the Chinese are scratching. If the behavioral exchanges between all three nations interact strongly, it is then possible to treat the three nations as a subsystem.

A fundamental property of system units is that they can be coupled or linked. That is, two or more system units (or nations) can be regarded as couple to form a single sub-system. There are two ways of achieving this linkage. One way is by forcing; the coupling as two automobiles may be locked together after a head-on collision. By way of analogy, the process may well be just what is happening when we group a set of nations together without concern for the effect the linkage has upon the conditions of the new sub-system. To understand this systems problem, let us begin by organizing the facts of international relations according to two points of reference, the actor and interactions. McClelland (1966) suggests that the block diagram in Figure 1 symbolizes international relationships of whatever variety, once the relationships are broken down into their most elementary form:

> The conception of the international system is an expanded version of the notion of two actors in interaction. A view of a whole phenomenon is involved. The outermost boundaries of international relations are suggested if we imagine all of the exchanges, transactions, contacts, flows of information and actions of every kind going on at this moment of time between and among the separately constituted societies of the world. (McClelland, 1966, p.20).

Figure 1. Basic Pattern of Interaction

International relations are then conceived to be the consequences of the vast numbers of particular purposes, intentions, expectations, and efforts on the part of national decision makers which do not necessarily mutually influence one another. Yet, some strands of action and reaction do affect each other directly. Some events heighten the linkage between nations. The point to be made here is that the linkage must be made with regard to linking inputs and outputs, with other parts being left alone no matter how readily accessible they may be.

It is our position in this paper that the analysis of the system can be made rigorous. We shall begin with two nations, P and R. There are two types, or ways, of coupling these nations. The first way is when P is coupled to R such that P's changes in behavior affect or determine in some way what R's behavior or change in behavior will be, but P's changes do not depend upon what behavior R is exhibiting. Thus, P can be said to be <u>dominant</u> over R. The second coupling occurs when the two nations are linked in such a way that they both affect each other's behavior; such a relationship can be said to be <u>co-determined</u>. It is necessary to point out that the defining of the component parts of the system does not determine the way of coupling. The corollary to this statement is that a whole system, built upon its parts' given behavior, is not sufficient to determine its behavior as a whole. Only

when the details of coupling are added can the whole's behavior be determined. (Ashby, 1952).

To this point, we have been defining a simple sub-system with only two nations and interaction. We can now move to a more complex sub-system of more than two entities. When this is done, we must define direct and indirect effects. When two nations, P and R, are coupled in such a way that a change in the behavior of one nation affects a change in the behavior of the other during a given time period, say a month, the effects are termed direct effects. The actions of nation P to nation R may thus have a direct effect upon the actions of nation R to nation P. In addition, the actions of nation R to nation P may indirectly affect P's actions to a third nation, Q. The effects of the relations between two nations upon another relationship in a complex sub-system are termed indirect effects.

Now that we have specified the types of linkage which are possible, and distinguished between different forms of effects, we must delineate the form of relationships conceptually developed above. This is partially accomplished with the following equation:

$$B_{R\rightarrow P,k,t} = \sum_{\ell=1}^{m} \bar{\alpha}_{\ell} B_{P\rightarrow R,\ell,t} \qquad (1)$$

where $B_{R\rightarrow P,k,t}$ is the behavior of nation R directed toward nation P on dimension k at time t.

$\sum_{\ell=1}^{m} \alpha_{\ell} B_{P\,R,\ell,t}$ is the weighted sum of each of nation P's behaviors toward R, as measured respectively along the m dimensions of behavior. The weights (α's), used in computing the sum, are the relative importance of nation P's behavior on each dimension in influencing the behavior of nation R on the dimension k.

This equation states as a working hypothesis that a nation's behavior results from the patterns of action of its object or opponent, i.e., reciprocity. Other works in international relations (e.g., Tanter, 1972; Bartos, 1966)

have suggested similar hypotheses.

But certainly international re'ations is more than a tennis match in which each actor's response is to his opponent's service. There are over-time forces at work within a nation which influence the choice of a specific strategy. These forces lead to an inertia in the way one nation treats or acts towards a specific object nation. The actions conform to Halperin's statement that "...most of the actions taken by bureaucracies involve doing again or continuing to do what was done in the past. In the absence of some reason to change their behavior, orgainzations keep doing what they have been doing." (1970, p.9). This bureaucratic inertia in explaining the performance of foreign policy organizations is appealing and leads to the working hypothesis that a nation's behavior in foreign policy results from its own prior patterns of actions. Stated formally:

> A given nation's level of output towards a specific object nation is a product of the previous level of output.

Mathematically, this can be translated into the linear euqation

$$B_{R\ P,k,t} = \alpha_k B_{R\ P,k,t-1} \qquad (2)$$

where the symbolization is identical to equation (1) and t-1 is the time period one duration earlier.

Equation (1) and (2) can be joined to form a single qquation:

$$B_{R\ P,k,t} = \alpha_k B_{R\ P,k,t-1} + \sum_{\ell=1}^{m} \alpha_\ell B_{P\ R,\ell,t} \qquad (3.1)$$

where the symbolization remains the same as in the two preceding equations. What this equation states mathematically is the contention that a given nation's level of foreign policy output toward that opponent and a function of the opponent nation's level of output along each of the foreign policy

dimensions. Put more simply, behavior is a function of bureaucratic inertia and reciprocity.[1]

Equation (3.1) fully operationalizes the concept of direct linkage. When systematic planning involves either a direct response to an object nation's actions or is based upon consistent actions followed over time, a direct link between nation R and P is established. In the earlier discussion of dominant relationships versus co-determined relationships it was noted that if R's behavior to P is affected by P, and P's behavior to R is not affected by R, the the relationship is a dominant relationship of P over R. Analyzing the foreign policy exchanges between P and R, if there is a difference in the percentage of variance explained from P to R as opposed to that explained in the behavior from R to P, we can identify a dominant relationship in which the case for dominance is determined by the larger percentage of variance explained. If the percentage of variance explained is low for both P to R and R to P, the nations are autonomous and act without regard to each other's behavior.

When it is applied to an empirical case such as the relationship between the Soviet Union and the United States, equation, (3.1) will spell out the relative influence of inertia and reciprocity on the responses of the actor nation. The parameter weights (α s) would identify the "normal" response behavior in the relationship between the two nations. When these parameter weights are determined, we can estimate what each nation's response behavior will be from knowledge of the particular mixture of its prior behavior and the

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[1]For a further development on the relationship between foreign policy exchanges and the forces of interia and reciprocity, see Philips (1972a) and Phillips and Crain (1972).

behavior it receives from the object nation. Equation (3.1) can thus be written such that

$$\hat{B}_{R\,P,k,t} = \alpha B_{R\,P,k,t-1} + \sum_{\ell=1}^{m} \alpha_{\ell}\ B_{P\,R,\ell,t} \qquad (3.2)$$

where $\hat{B}_{R\,P,k,t}$ denotes the estimated response of the actor nation.

While the forces affecting the response behaviors of the United States and the Soviet Union may be fixed from one time period to the next, the actual response behavior of each actor may not. That is to say, for a given expectation of response behavior, there would be a residual amount of each nation's response behavior which is not explained by inertia and reciprocity. The difference between the observed and the expected response behavior (the residual response of each nation) represents the over- or under-response in the relationship between the two nations. Where the Soviet Union's expected behavior to the United States, for example, exceeds its actual behavior, the Soviet Union is under-responding to the United States. Conversely, where the actual behavior of the Soviet Union to the United States exceeds its expected behavior, the Soviet Union is said to be over-responding to the United States.

This over- and under-response is conceptualized here to be potentially explainable by the indirect effects of behavioral relations in the other dyads of the triangular sub-system of the Soviet Union, the United States and China. For the specific case of the Soviet Union's behavior to the United States, the direct effects are examined by analyzing the United States' behavior to the Soviet Union and past Soviet action toward the United States. The over- or under-response of the Soviet Union is then analyzed by examining the indirect effects of the Soviet Union's behavior to China, China's actions

toward the Soviet Union, Chinese behavior to the United States, and the United States' behavior to China. Thus, there are four possible indirect effects and two direct effects for each relationship. Equation (4) formalizes the impact of indirect effects:

$$B_{R\rightarrow P,k,t} - \hat{B}_{R\rightarrow P,k,t} = \sum_{q=1}^{m} \gamma_q I_{q,t} \qquad (4)$$

where $B_{R\rightarrow P,k,t} - \hat{B}_{R\rightarrow P,k,t}$ is the residual behavior from nation R to nation P left unexplained after inertia and reciprocity have been considered. That is, it is the over- or under-response of nation R to nation P.

$\sum_{q=1}^{m} \gamma_q I_{q,t}$ is the weighted sum of the behavioral relations in the other four dyads of this triangular sub-system. The weights (γ's) are the relative importance of the relations between the nations in these other dyads on m dimensions.

Analysis of the Data

In order to analyze the relations between the Soviet Union, the United States, and China, data were drawn from the foreign conflict code sheets of the Dimensionality of Nations Project (Rummel, 1966). Included in the data were the conflict events exchanged between these three nations during the time period June 1962 to May 1968, 72 months of data. The data were orgainzed into a super P matrix of 21 variables (Table 1) over the 72 months for each of the six dyads, or 432 observations (Figure 2). This matrix was then factor analyzed to delineate the basic patterns of conflict exchanges for this triangular sub-system.[2] Table 2 presents the orthogonally rotated factors from this analysis. Eight factors, or patterns, emerged with eigenvalues of 1.0 or greater. Together, these eight factors accounted

[2] The twenty-one variables were standarized by column and correlated (i.e., transformed) by product-moment correlations. Component factor analysis was employed to delineate principal axes which were rotated to a simple structure solution by varimax criteria.

for 77.3 percent of the total variance in the original conflict matrix. Not all of the variables were well accounted for by these eight factors, however. Two variables, "protests" and "non-violent behavior acts", were particularly not well accounted for as evidenced by their low communalities: .44 and .27 respectively. In the case of the other 19 variables, 53.3 to 99.9 percent of their variance was accounted for by the eight factors.

A close examination of the factor loading matrix reveals that these factors represent eight distinct patterns, or dimensions, of conflict behavior. That is, the variables loading highest on each factor come from a particular area in the original list of variables. The first factor is thus characterized by a combination of acts which fall in the primary category "negative communications." The second factor highlights those acts which are classified as "official military violence." The next strongest factor, in terms of the amount of variance explained, is the fourth factor which is characterized by warning and defensive acts"; it includes alerts, mobilizations, and troop movements.

With the remaining five factors, we find a partitioning of the original variable areas "negative sanctions" and "unofficial violence" into several more specific patterns of conflict behaviors. The fifth factor is a pattern of negative sanctions, specifically unclassified negatvive behavior acts. The sixth factor is characterized by a combination of boycotts and embargoes, and aid to rebellious groups and to the object's violent enemy. Diplomatic conflict is identified with the seventh factor. In particular, this pattern of conflict exchanges includes severences or suspensions of diplomatic relations, and expulsions or recalls of diplomatic personnel. What is important to

keep in mind about this factor is that it is a bipolar factor, i.e., one high negative loading and one high positive loading. As such, the factor indicates that this pattern of conflict exchanges involves either suspensions or severences of diplomatic relations, or expulsions or recalls of diplomatic personnel, but not both types of behavior. Thus the three nations seem to choose one or the other but not both forms of behavior at a given time.

The last two factors, factors three and eight, reflect the splitting of the unofficial planned violence behaviors into two specific patterns. With the third factor, the emphasis is on those acts of unofficial violence which were aimed at personnel and private property. The eighth factor is characterized by the specific experience of attacks on governmental property, particularly embassies.

This delineation of the conflict exchanges between the Soviet Union, the United States, and China into eight patterns characterized by the prevalance of one particular type of behavior closely approximates the findings of other studies of the conflict exchanges between nations. Previous analysis (Phillips, 1969; Hall and Rummel, 1968; Oliva and Rummel, 1969; McClelland and Hoggard, 1968) have tended to point out that there are four or five major patterns of conflict exchanges which are easily identified as negative communications, negative sanctions, official military violence, warning and defensive acts or troop mobilizations, and unofficial violence. The point of departure between this study and the previous analyses comes with the partitioning of two of these major patterns into several more specific patterns of conflict exchanges as indicated above. One obvious explanation for this fractionalizing of behavior patterns rests with the

fact that we are dealing with a much smaller and more narrowly focused set of conflict dyads. As a result, we would expect those patterns that were combined in the analyses of the conflict exchanges between all nations to be separated out there due to the focusing in upon a specific sub-system.

The findings seem to indicate the use of more complex systems of conflict management by the members of this triad. The availability of a number of alternative signals (corresponding to the various patterns of conflict behavior) and the greater specificity of these signals would seem to suggest a system of conflict management designed to deal with a wide range of possible conflict situations. This complexity in the handling of the conflict with each other seems natural given two important considerations. First, these three nations have experienced high amounts of conflict between them for a long period of time. With each conflict, the nation's system for dealing with conflict situations is modified so as to be able to cope with a similar situation in the future. Secondly, each nation has developed a specialized set of experts in dealing with one or both opponents. This group of experts is likely to have a capacity for sorting out and discriminating between several different signals or behaviors which for the average dyadic exchange would be simply indistinguishable.

This brings us to the examination of the particular linkages between the Soviet Union, the United States, and China. Earlier it was suggested that the relations between any two nations were a function of two forces, inertia and reciprocity. In particular, it was proposed that a nation's foreign policy outputs to a specific opponent were a product of the actor nation's prior behavior to the opponent nation and the direct effects of the

opponent's behavior to the actor nation on each foreign policy pattern. Together, these two forces establish the direct linkages between the nations in this triangle, as formalized in equation (3.1).

In order to investigate the relative impact of inertia and reciprocity on the relations between these three nations, it was first necessary to organize the factor scores in the preceding analysis into two matrices for each relationship, (see Figure 3). The first martix represents the amount of conflict behavior sent from an actor nation (R) to an object nation (P), where the rows are considered as recording the amount of behavior on each of the eight factors in each of 71 months.[3] The second matrix was organized such that it included the behavior sent in the same time period from P to T, and the behavior sent from R to P in the time period t-1. In the case of the Unites States' behavior to China, for example, the data in the second matrix thus includes China's behavior to the United States for the time period July 1962 to May 1968 and the United States' behavior to China for the time period June 1962 to April 1968, a one month time lag.

Since both matrices contain multiple variables (eight in the first and sixteen in the second), canonical regression was employed in this analysis. Consider the following: we have two matrices, M for the amount of behavior sent, as a response, from the actor nation to the object nation, and N for the combination of the amount of conflict behavior the object sends to the actor nation and the amount of conflict behavior sent from the actor

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[3]As indicated earlier, inertia refers to the impact of the level of an actor's output toward an object one duration earlier. To examine the effects of inertia, it was necessary to treat the second month in the data set (July 1962) as the beginning point in the analysis of each actor nation's behavior. The first month in the data set (June 1962) was then treated as the actor nation's behavior to an object nation at t-1. Thus, 71 rather than 72 time points were examined.

nation in the previous month. A linear transformation of M can be performed which will yield orthogonal (independent) dimensions of M. By employing canonical analysis to solve for the least squares fit between M and N, these dimensions of M will be ordered so that the first will have the maximum correlation with N, the second will have the maximum residual correlation with N, and so on. Let T be the appropriate transformation for M, and P the (necessary resulting) transformation of N. Then,

$$MT = NP + C, \text{ and}$$
$$Y = V + C$$

where MT = Y, NP = V, and C is the least-squares error. The restrictions on Y and V are:

$$Y_k' V_g = K_{kg} \text{ (canonical correlation)}, k=g;$$
$$Y_k' V_g = 0, k \neq g;$$
$$Y_k' Y_k = V_g' V_g = 1; \text{ and,}$$
$$Y_k' Y_g = V_k' V_g = 0, k \neq g.$$

Thus, the research question becomes; can the two matrices be dimensionalized so that they share a good deal of the variance? Put another way, can we find patterns in both matrices which are highly correlated? The canonical model is the best representation of this research question.[4]

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[4] While it would have been possible to use regression analysis and regress behavior sent for each of the eight behavioral variables independently upon the sixteen variables identified in the N matrix, we do not feel that this would have been appropriate. We contend that nations do not send just a single one of the eight types of behavior identified here. In essence, there are interactive effects which affect behavior sent as well as behavior received. These effects are important, and they must not be considered, a priori, to be nonexistent. Regression models both consider interactive effects to be nonexistent and are affected by them in uninterpretable ways when those effects are present. The canonical model is not affected by these interactive effects. For further development of this point, see Phillips (1972).

Employed with the above two matrices, the canonical method delineates linear combinations of variables from both matrices such that the combinations (or patterns) are maximally intercorelated. At the same time, each pair of linear combinations (termed variates) will be independent of the other variates delineated in either matrix.[5]

Six canonical regressions were then performed, one for each of the six dyads in the sub-system under investigation. The canonical results are presented in Tables 3 through 8. An examination of the trace correlations ($\bar{r}$) for each dyad reveals that there is considerable overlap between the two matrices: the trace correlations range from approximately .49 to .69. In other words, twenty-five to forty-six percent of the variance in one conflict behaviors of each nation toward an object nation in this sub-system can be accounted for by the forces of inertia and reciprocity.

The nature of the direct linkages between China, the Soviet Union, and the United States can thus be visualized, as in Figure 4 where the trace correlations represent the strengths of these linkages.[6] As noted earlier, we can identify the type of coupling, or relationship, between two nations from the amount of differences in the percentage of variance explained from nation R to P as opposed to from P to R. Where there is a differential in the percentage of variance explained, the stronger relationship is said to be dominant. Conversely, where the percentage of variance is equal, the relationship is said to be co-determined. Examining Figure 4 closely, we find the

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[5]For a further development of canonical analysis, see Morrison (1967) or Phillips (1972).

[6]The trace correlation delineates the general overlap between the two matrices of foreign policy inputs and foreign policy outputs. It represents the average expected relationship between the two pairs of variates from the spaces represented by the two matrices, M and N.

relationships in this triangular sub-system to be co-determined; the differences in the percentage of variance explained are quite small on each side of the triangle. Thus it would appear that the actions of the nations in each dyad have a similar (or equal) effect on its partner in the dyad. The differences in behavior explained ranges from four to seven percent and is not substantial enough to warrant assumptions of asymmetric linkages. The arrows indicate the direction of behavior which is being predicted.

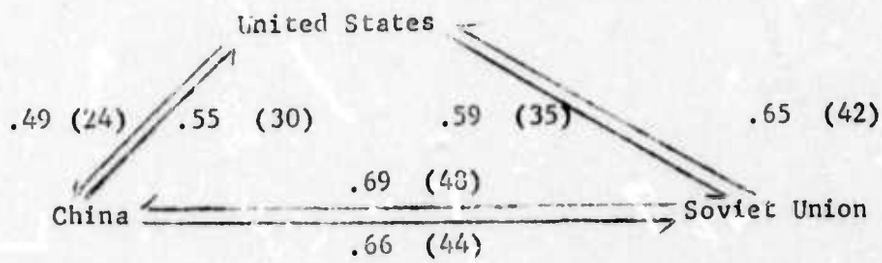

Figure 4. Strength of Linkages in the Triangular Sub-System[7]

Let us now consider the findings for specific behavioral strategies within each dyad. The first canonical analysis was for the behavior of China to the Soviet Union. In this case, we find two specific relationships which merit close attention as they represent correlations between patterns of .99 and .96 -- the first and second variate pairs respectively. With the first variate pair there is a strong relationship between the amount of official military violence China sends to the Soviet Union and the amount of military violence it receives from the Soviet Union. At the same time, there seems to be little or no relationship between China's past and present military violence behavior to the Soviet Union. Thus, it appears that when

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[7] The numbers enclosed in parentheses represent the percentage of variance in common between the two matrices M and N. It therefore delineates the percentage of variance in behavior which is explained by reciprocity and inertia.

it is confronted by official military violence from the Soviet Union, China is likely to reciprocate in kind, but not likely to continue such behavior over time. The second relationship indicates the use of a slightly more complex behavioral strategy by the Chinese. Specifically, this second variate pair suggests that when confronted by strong threat from the Soviet Union and by the absence of Soviet activity on the two conflict dimensions, unclassified negative acts and boycotts or aid to other nations,[8] the Chinese tend not only to respond with strong threats but also to signal their hostility by demonstrating popular resentment toward the Soviet Union. Together, these two variate pairs account for thirty-seven percent of the variance in China's behavior to the Soviet Union.[9] They point to China's behavior to the Soviet Union as being largely a function of the conflict behavior received from the Soviet Union (reciprocity) rather than as a product of some set of strategies based upon prior Chinese actions (inertia).

In the analysis of the reverse dyad (the Soviet Union's behavior toward China), reciprocity again is found to have a major role in accounting for the conflict behavior sent by the actor nation in the dyad. This is clearly evidenced with the first variate pair which reveals a strong relationship between the military conflict behavior the Soviets direct at China and the military conflict behavior they receive from China. In particular, it appears that when confronted by official military violence from the Chinese ,

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[8]By other object nations, we refer to those nations which are hostile to the object nation. In the case of China, this refers to a nation such as India.

[9]We have presented two different percentage figures in this respect. The first set referred to the percent overlap in the two matrices under consideration and was calculated by squaring the trace correlation. The percent referred to in the current discussion refers to the specific percentage or variation in one nation's behavior which is accounted for by inertia and reciprocity.

the Soviet Union will more than likely reciprocate by directing official military violence toward China. As in the analysis above, there seems to be little or no relationship between past and present Soviet behavior to China on this conflict dimension. With the second variate pair, however, prior Soviet behavior (inertia), does appear to play an important part in explaining Soviet actions to China. Specifically, this refers to those cases where (1) the Soviets engaged in boycotts of the Chinese and aid to other nations who are hostile to China in the previous time period, (2) the Soviet Union is now confronted by the same type of conflict behavior from China, and (3) there is and absence of a strong threat from the Chinese. This second relationship suggests that in such cases the Soviet Union will tend to escalate the conflict behavior it sends to China in the current period with the addition of unclassified negative acts. The importance of prior Soviet behavior in its relations with China is even more clearly portrayed in the third variate pair. Here there is a strong relationship beyween the unclassified negative acts the Soviets direct at China with prior Soviet unclassified negative acts and warning and defensive acts. It would thus appear that the Soviets tend to show strength (warning and defensive acts) and then tend to back off in the next period by reducing their behavior to negative acts, waiting Chinese response.

Turning to the relations between China and the United States, the third analysis focuses upon China's behavior to the United States. Three specific relationships deserve close attention. In the first case, warning and defensive acts sent in the previous period affect the combination of threats and diplomatic conflict that the Chinese send in the present period. More precisely, this first relationship suggests that when faced with the lack of

a discernable pattern of American response to warning and defensive acts by the Chinese in the previous period, China is likely to renew its hostility to the United States by directing negative communications and diplomatic sanctions at the United States as well as continuing its previous actions. A similar attempt to seize the initative in the conflict exchanges between these two nations is found in the second relationship. In this case, Chinese official military violence toward the United States does not appear to be related to either prior Chinese actions of the United States or to the actions China receives from the United States. The relationship delineated in the third variate pair suggests a retreat by the Chinese in their hostility to the United States when faced with intense conflict from the United States. Having engaged in diplomatic conflict aimed at the U.S. in the previous period and being currently faced with military violence from the U.S., the Chinese can be expected to "back down." This concern for avoiding any direct military confrontation with the United States has been observed previously; "...the Chinese seem to have attached the highest priority to the task of avoiding a direct military clash with the United States that could lead to a nuclear war." (Halperin, 1965, P. 13).

Examining the other side of the coin -- the United States' behavior to China -- three patterns of relationship seem to emerge. In the first case, the United States appears to shift its hostility toward China, over time, from the area of diplomatic sanctions to that of unofficial violence when there is an absence of any distinguishable pattern of Chinese hostility being sent to the United.StStes. Put another way, when there is a lull in the hostility received from the Chinese, the United States tends to take

this opportunity to de-escalate its hostility toward China. With the second and third variate pairs, we find that the actions the United States send to the Chinese are directly related to the pattern of conflict behaviors received from China. Specifically, the second relationship posits that when it is confronted by strong threat, the United States will respond with strong threat toward the Chinese. A similar "tit-for-tat" relationship is expressed in the third variate pair: when it receives official military violence from China, the United States can be expected to reciprocate in kind. This strategy is the direct opposite of that adopted by the Chinese as noted above.

This brings us to the final set of dyads analyzed -- the relations between the United States and the Soviet Union. Considering the Soviet Union's behavior to the United States, the patterns of relationships delineated for this dyad suggest a tendency on the part of the Soviet Union to escalate the conflicts between the two nations. That is, it appears that the specific behavioral stragegies employed by the Soviet Union involve not only a response to the particular type of conflict behavior it receives, but also punitive measures. We see with the first variate pair that when it is confronted by strong threat from the United States -- and when it did not direct acts of official military violence at the U.S. in the preceding period -- the Soviet Union can be expected to reciprocate with strong threat combined with expulsions and recalls of diplomatic personnel. The Soviet Union thus seems to be saying to the United States: If you send this particular type of conflict behavior, I will not only respond in kind, but I will punish you for that action with this action.

Soviet escalation of the hostilities it directs at the United States is

is even more dramatically portrayed in the second variate pair. Here we find that having restricted the expression of public resentment (unofficial violence) toward the United States in the previous period, the Soviet Union tends to direct acts of official military violence at the U.S. when the hostility it receives from the United States is distinguished by verbal conflict alone. In contrast, when the hostility received from the U.S. is distinguished not only by verbal conflict but also by an absence of official military violence, the Soviets do not resort to official military violence. Rather, the Soviet Union can be expected in these instances to reciprocate in kind. What this seems to suggest is that the reliance of official military violence in the Soviet response to U.S. hostility reflects a strategy of "hitting" unexpectedly to secure some immediate advantage vis-a-vis the United States, to seize the initiative in the Soviet conflictual relations with the United States.

The final relationship in this system of Soviet strategies further points to the apparent tendency of the Soviet Union to escalate the conflicts between it and the United States. In the absence of any distinguishable response by the United States to prior negative communications from the Soviet Union, the Soviets are likely to escalate their hostility toward the United States by expelling American diplomatic personnel and recalling its own diplomatic personnel.

Whereas Soviet behavior to the United States seems to entail the escalation of hostilities, the United States' behavior to the Soviet Union appears to be characterized by the attempt to de-escalate these hostilities. More precisely, it appears that the United States can be expected to confine itself

to a set of behavioral strategies designed to, at most, reciprocate the type of conflict behavior it receives. With the first variate pair we find that when it receives both strong threat and diplomatic conflict (expulsions and recalls of diplomatic personnel) from the Soviet Union, the United States is likely to direct only strong threat towards the Soviets. The apparent attempt to de-escalate the conflicts between these two nations is more clearly seen in the second and fourth variate pairs. In the former case, the United States' behavior to the Soviet Union incorporates not only a reciprocal response to the amount of negatiave communications received but also an absence of military violence directed at the Soviets. The latter case suggests that if faced with Soviet-instigated reductions in relations between these two nations, the United States will tend to avoid any display of public resentment toward the Soviet Union. Taken together, the relationships revealed in these variate pairs point to a set of strategies which attempt to keep open the door to a possible rapprochement while seeking to effectively deal with the specific conflict situation encountered.

On the whole, the nations in this triangle thus appear to be closely linked by the forces of inertia and reciprocity. A good deal of the conflict behaviors between any two of these nations was accounted for by one or both of these forces. As to the specific behavioral strategies employed by each nation, it seems that these are largely determined by the nature of the situation faced. Where the situation encountered involves high threat to the actor nation(i.e., where it receives warning and defensive acts and/or official military violence), the tendency appears to be that the actor nation will reciprocate in kind. Thus, the actor nation is likely to disregard existing

strategies based on prior experiences; the three nations appear to be unable to cope with these high threat situations with their existing behavior (inertia), The exception to this appears with China's behavior to the United States in which high levels of threat received from the United States seem to result in the Chinese backing down. In contrast, in low threat situations inertia becomes the governing force. In such instances, both the Soviets and the Chinese appear to take advantage of the situation to escalate their hostilities toward their respective opponents. Only with the United States' actions do we find an indication of an attempt to de-escalate the hostilities in the triangle.

The Effects of Third Parties and the Relations Between Dyads

Returning to the introduction, the possibility that each of the three nations in our analysis takes into consideration the actions of both of the other parties and that it might also coordinate its actions toward both was developed. To this point the analysis has taken the perspective that the exchanges between two nations were a function of policy inertia and reciprocity to the actions of the object nation. This section attempts to explain the over- or under-responses to inertia and reciprocity by resorting to the other actions taking place in the triangle at that point in time.

Equations (4) formalized the impact of the indirect effects. Operationally, the residuals in the canonicals reported in the analysis immediately preceding this were regressed upon the total amount of conflict sent in a given month between the four indirect relationships. Thus, in the case where the United States' behavior to the Soviet Union was analyzed, for example, its behavioral residuals from the above section were regressed upon the total conflict behavior from the Soviet Union to China, China to the Soviet Union, China to the United

States to China. Canonical analysis was again employed in this analysis. The choice of canonical analysis is governed again by our expectations that combinations of actions sent in the direct relationships are interrelated with combinations of dyads' actions in the indirect set of relations.

The canonical results are presented in Tables 9 through 14. In each case the overlaps between the over-and-under action of an actor to an object and the conflict behavior among indirect links of the triangle is not extremely large. On the other hand, specific strategies within each of these relations do point to strong relationships. It is the first and second canonical variate pairs which demonstrate these marked findings.

The first analysis was for Soviet over-and-under response to the United States. Here, it is American hostility toward China and Chinese hostility toward the United States which affected Soviet over-and-under response to the United States. The relationships between the Chinese and the Soviets do not seem important in explaining Soviet behavior to the United States. With the first variate pair, it appears that when the Chinsese are sending hostile words and deeds to the United States and the United States is relatively silent, the Soviets tend to overact in negative communications, diplomatic conflict, and violence aimed at governmental property, but to under-act in violence associated with U.S. personnel. This pattern of Soviet over-and-under response suggests that when the Chinese are engaged in hostilities aimed at the United States, the Soviets join in this activity, protesting loudly but not attempting to physically hurt the United States or its personnel. Put another way, the Soviet Union appears to provide only token support for Chinese actions toward the United State. The second variate pair indicates that when the U. S. is

involved in directing conflict at the Chinese, the Soviets are likely to over-respond in negative communications, official military violence, and negative acts (unclassified). At the same time, the Soviets tend to under-respond with unofficial violence aimed at American government property. Thus the Soviet Union appears to be more vehement in its actions toward the United States than might normally be expected when the U.S. is engaged in hostilities aimed at the Chinese. Considering the relationships expressed in these two variate pairs jointly, there seems to have been a protective mechanism at work during the period analyzed, with the Soviet Union playing the role of protector in Chinese conflict with the U.S.

Soviet actions to China not accounted for by inertia and reciprocity present a somewhat more complex picture (see Table 10). In the preceding case, it was noted that when the Chinese are actively hostile to the U.S., the Soviet Union provides at least token support for Chinese actions by acting against the United States. In the present case, it appears that such a situation in turn, has an important impact on the Soviet's behavior to China. When the Chinese are engaged in hostilities with the United States, the Soviets are also emitting hostile acts to the U.S.. Missing from that analysis, however, is the fact that the Soviets tend to over-act towards the Chinese with regard to official military violence and to under-act with regard to unofficial violence against Chinese government property. Thus it appears that in periods of Sino-American difficulties, the Soviet Union attempts to take advantage of China's involvement with the United States. It may be the case that the Soviets are trying to gain some territorial concessions or to solidify their positions with regard to border disputes with the Chinese.

Joining these two Soviet behaviors, it would appear that in periods of Sino-American difficulties the Soviets adopt a two-pronged policy. With this policy, the Soviets attempt to take advantage of Chinese involvement with the United States to protect or to better their position vis-a-vis the Chinese. In such instances, the Soviets apparently seek to preserve, at least superficially, some semblance of a united front against the United States by expressing hostility towards the U.S. This hostility towards the United States seems to be more marked when the American engage in sending hostile acts to China. At the same time, however, the Soviets tend to take advantage of these difficulties by acting against the Chinese, In a sense, the Soviet startegy resembles an end-around play in football where the play involves a feint in one directions((Soviet hostility to the U.S.) and then a sweep around the opposite end (Soviet military actions against the Chinese).

Turning to the Chinese activities, the first analysis is of China's direct relations with the United States. In this case, the direct relationships are affected by Chinese actions to the Soviet Union and by the actions of the United States to the Soviet Union. Thus, when both the Chinese and the United States are sending hostile messages or deeds to the Soviet Union, the Chinese are exhibiting more than normal amounts of boycotts and embargoes, and diplomatic conflict activities targeted to the United States, and are under-acting in terms of unofficial violence aimed at government property of the United States. On the other hand, when the Chinese are having difficulties with the Soviet Union, (i.e., when the Chinese are both sending and receiving hostile acts from the Soviet Union), they are definitely under-acting toward the United States with regard to both unofficial violence and negative sanctions

surrounding the suspension and reduction of diplomatic relationships. The Chinese appear to have little time for interactions with the United States when they are undergoing real difficulties with the Soviet Union. It should be remembered that the Chinese have increasingly come to see their interactions with the Soviet Union as being potentially more dangerous and thus more salient to them than their interactions with the United States.

With regard to Chinese direct relations with the Soviet Union, the same basic pattern of relationships seems to hold. (Table 12). When the Chinese are actively involved with the United States in hostilities, two patterns of relationship emerge. In the one case, the Chinese show a definite tendency to under-act toward the Soviets in terms of unofficial violence and warning and defensive acts when there is trouble with the United States. In the second case, we again find that in the face of difficulties with the United States, the Chinese also appear to over-act with regard to unclassified negative acts. This apparent break in the suggested pattern of Chinese disengagement with one nation while engaged with the other may be explained, in part, by the fact that the Soviets are directing acts of official military violence at the Chinese in similar situations (i.e., when the Chinese are actively involved with the U.S.). On the whole, however, the Chinese still seem to prefer not to engage both the Soviet Union and the United States at the same time -- when they are engaged with both opponents, the Chinese tend to limit their involvement with one of them to "low threat" actions.

The final set of relationships deals with the United States' direct relations with the Soviet Union and the Chinese Peoples' Republic respectively. Turning first to the U.S. direct relations with the Soviet Union (Table 13),

it appears that when the Chinese are hostile towards both the United States and the Soviet Union, the United States follows a policy designed to ease the tensions in the triangle. If the Chinese send hostile actions to the United States, the U.S. over-acts with regard to the negative messages it directs at the Soviet Union. In connection with Chinese hostilities toward the Soviet Union, the United States under-acts toward the Soviet Union with regard to expulsions and recalls of diplomatic personnel, and with regard to unofficial violence against Soviet government property. Thus it would appear that in periods of Sino-Soviet difficulties, the United States refrains from adding to the Soviets' difficulties, and seeks to take advantage of this situation to reduce the hostilities between the Soviet Union and the United States. On the other hand, the U. S. is likely to "protest" to the Soviet Union when the Chinese are hostile towards the United States. There is another strong relationship between U.S. actions towards the Soviet Union and Chinese hostility to <u>both sides</u>. In this case, the United States shows a strong tendency to a avoid using official military violence or warning and defensive acts aimed at the Soviet Union. It thus appears that the United States prefers prudence when the relations in this triangle become clouded and potentially dangerous.

Examining United States actions toward the Chinese Peoples' Republic, there appears to be two patterns or strategies of action. In connection with U.S. hostilities aimed at the Soviet Union, the United States tends to suspend or reduce relationships to the Chinese and to over-respond with unofficial violence aimed at government property of the Chinese. Secondly, the indirect effects of Chinese hostility to the Soviet Union and, in turn, Soviet hostility to the United States seems to be that the United States will under-act with

regard to both diplomatic conflict and warning and defensive acts. At the same time, the U.S. is likely to increase the unofficial violence it directs at Chinese government property. The United States thus appears to be attempting to balance the relationships in the triangle. More precisely, it appears that the United States is seeking to balance this triangle by alleviating the tension, or hostility in an already dangerous period or by reducing its normal levels of conflict behavior.

In sum, these findings reveal that both the United States and the Soviet Union show at least one pattern in their direct relationships to the Chinese which is an attempt to coordinate hostilities to two nations at one time. However, only the United States appears to attempt to balance the relationships with the Chinese being governed in part by Soviet action to the United States. On the other hand, the Soviet Union demonstrated the only attempt at protection or support in these relationships when it over-responded to the United States in periods of U.S. hostilities aimed at the Chinese. As mentioned previously, the Chinese showed a clear preference in engaging in hostilities with only one of its opponents at a time, reducing its relationships with the other one (limitedly at least) in both cases.

Conclusions

The foreign policy exchanges between the United States, the Soviet Union, and China are closely interlocked. The variation in the conflict behavior between any two of these nations was assumed to be largely accounted for by the direct effects of the object nation. As the findings in fact indicated, both bureaucratic inertia and reciprocity account for a considerable amount of the variation in conflict behavior. It was also suggested that in considering

the exchanges between any two of the three nations, we must additionally consider what is happening in the other parts of the triangular system. Thus, the indirect effects of the other dyads upon the choice of an actor's behavior was examined, with the result that these indirect effects were found to add considerably to our ability to explain the specific strategies employed by each actor nation. Generally speaking, the combination of direct and indirect effects accounted for a sizable portion of the variation in the behavior between nations in each dyad in the triangle. As Table 15 indicates, approximately fifty percent of the variation in the foreign policy exchanges between the three nations was accounted for by this combination of direct and indirect effects.

But what of the fifty or so percent of the variation left unexplained? Assuming that this unexplained variation is the result of stochastic rather than measurement error, what other factors must we then consider in our attempt to understand the nature of the foreign policy linkages between the three nations. One such factor might be the amount of uncertainty each actor has about the other nations' intentions. In order to know the appropriate response to make an object nation, the decision makers of the actor nation must be able to understand clearly and unambiguously the messages which they receive from that object. But these decision makers may be confronted by a multitude of messages of varying types at any one time. In periods where the probability of each of the different types of messages being received is equal, the decision makers find themselves in a situation of little information and of high uncertainty as to the object's intentions. We would expect that these periods of high uncertainty would then have important implications for how the actor would respond to the object. The

question of the impact of uncertainty on the response of nations has been approached, most notably by McClelland (1965, 1968) and Phillips and Crain(1972). McClelland's work, for example, has shown that relative uncertainty values above a certain high level, signal the threshold of a crises. Phillips and Crain found that in periods of relative uncertainty below this threshold level, the higher the relative uncertainty is, the more reciprocity is the response. With regard to the sub-system considered here, the problem of relative uncertainty is particularly important considering the frequency of occurrence of crises in the relations between the three nations. In particular, we need to consider the impact of high relative uncertainty (i.e., that above McClelland's threshold level) on the response of these three nations.

The foreign policy exchanges between the three nations should not be considered as being governed by the identical restraints placed upon them through the parameters of inertia and reciprocity, however. Not only must the decision makers in these nations deal with pressures placed upon them by the other two nations in the triangle, but they must also cope with internal forces which may serve to constrain their choice of foreign policy actions. Chinese foreign policy, for example, was significantly, (although temporarily) disrupted by the events of the Cultural Revolution. Moreover, the domestic character of the three nations differ in a number of important ways. As a result, we might expect that not only will domestic events influence each nation's actions and limit its possible activities, but also that the impact of these domestic events will vary from one nation to the next. Unfortunately the manner in which domestic events influence foreign policy has not been well established to date. Yet we do suggest the need to

consider them (as well as the problem of uncertainty) as perhaps controlling the size of the unexplained variation of the relationships between the United States, the Soviet Union, and China. Initial work has shown that this approach is promising (Phillips, 1973).

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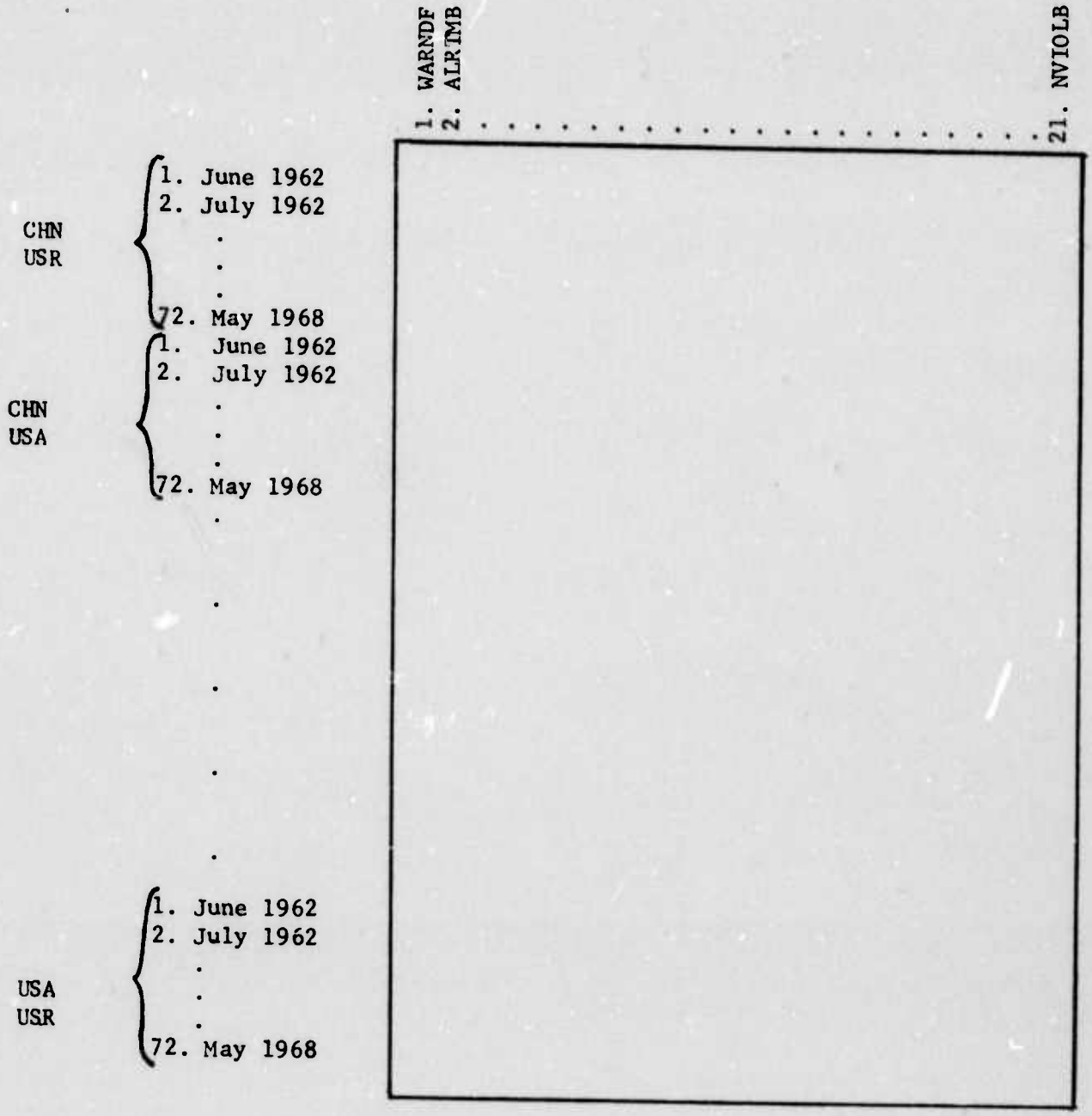

Figure 2. Organization of the Super-P matrix.

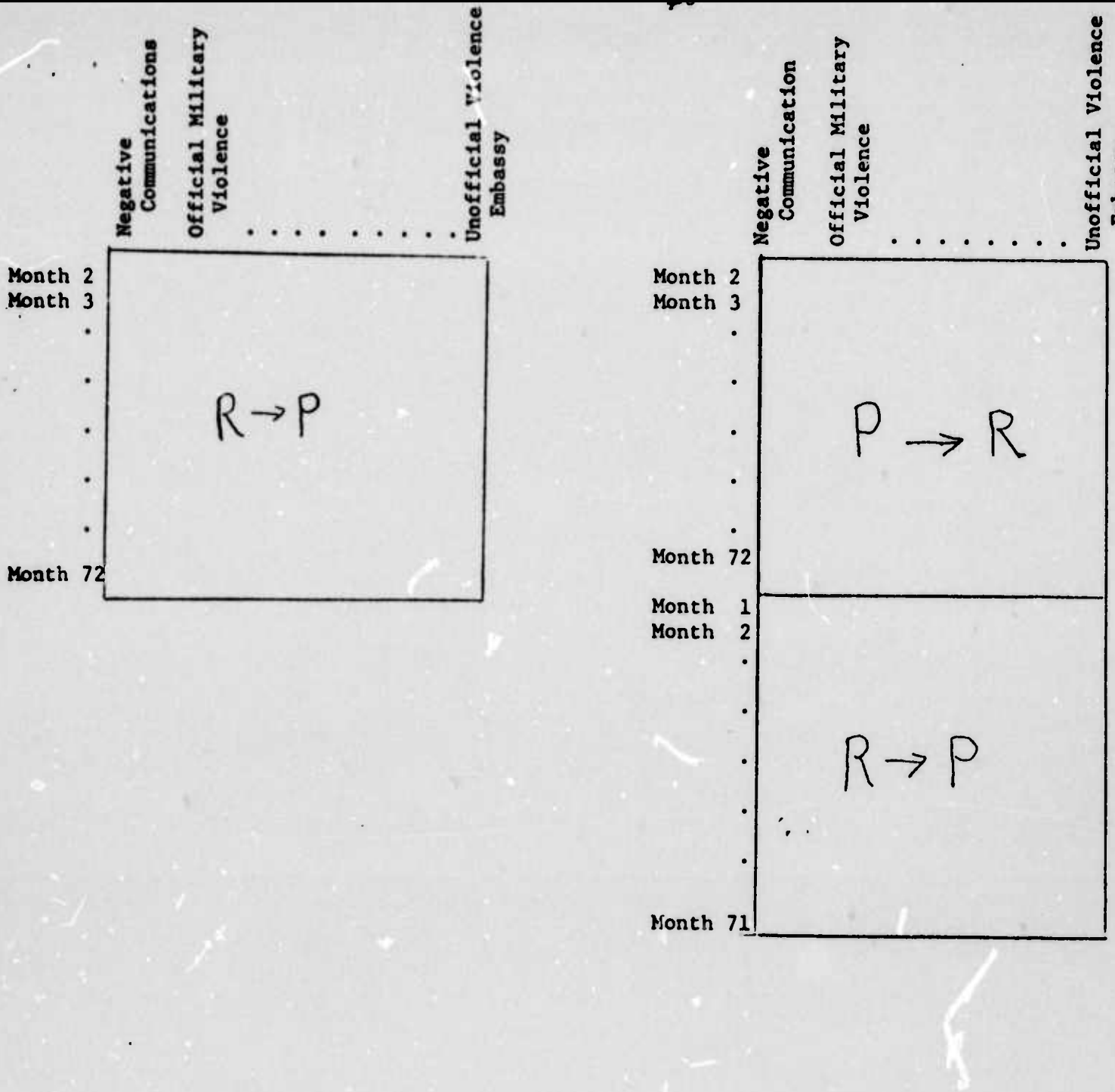

Figure 3. Organization of Factor Scores from Factor Analysis

Table 1
DON Dyadic Foreign Conflict Variables Used*

Primary Category	Variable No.	Code		Variable
Warning and Defensive Acts	1	WARNDF	-	Military Maneuvers or Troop Movements
	2	ALRTMB	-	Alerts, Mobilizations, and Military Movements
Official Acts of Violence	3	PLNVIL	-	Planned Violent Acts
	4	WARACT	-	Overt Violence
	5	DAYVIL	-	Days of Violence
Negative Sanctions	6	NEGACT	-	Negative Behavior Acts
	7	UNCNEG	-	Unclassified Negative Acts
	8	SEVDPR	-	Severances or Suspensions of Diplomatic Relations
	9	EXPREC	-	Expulsion or Recall of Diplomatic Officials
	10	BCOTIEM	-	Boycott or Embargo
	11	AIDREB	-	Air to Rebellious Group and to Object's Violent Enemy
Negative Communications	12	NEGCOM	-	Negative Communications
	13	WRTCOM	-	Written Negative Communications
	14	ORLCOM	-	Oral Negative Communications
	15	ACCUSN	-	Accusations
	16	PROTST	-	Protests
	17	MINTHM	-	Minor themes-warning; threat; denunciation; accusation; provocation; violent action . . .
Unofficial Violence	18	UNOFVL	-	Unofficial Planned Violence
	19	ATKEMB	-	Attacks on Embassy
	20	ATKPER	-	Attacks on Official Property Other Than Embassy and on Personnel
Non-violent Demonstrations	21	NVIOLB	-	Non-violent behavior**

* Primary code sheet categories are separated by solid lines. Variables 1-17 are Official Acts; variables 18-21 are Unofficial Acts.

** Mainly including nonviolent anti-foreign demonstrations

Table 2

Annotated Orthogonally Rotated Factor Matrix*
The Patterns of Conflict Exchanges in the Soviet - U.S. - China Sub-System, 1962-1968

Communality: Proportion of variation of each variable involved in the patterns; sum of squared factor loadings

Separate patterns of relationships between the variables

Loading: degree and direction of relationship of the variables with the pattern

Conflict Variables		H-SQR	1	2	3	4	5	6	7	8
12.	NEGCOM	0.966	0.97							
13.	WRTCOM	0.820	0.88							
14.	ORLCOM	0.631	0.77							
15.	ACCUSN	0.856	0.91							
17.	MINTHM	0.600	0.69							
3.	PLNVIL	0.948		0.97						
5.	WARACT	0.950		0.96						
6.	DAYVIL	0.969		0.98						
18.	UNOFVL	0.999			-0.71					0.71
20.	ATKPER	0.991			-0.99					
1.	WARNDF	0.866				-0.93				
2.	ALRTMB	0.877				-0.93				
6.	NEGACT	0.943					0.85			
7.	UNCNEG	0.724					0.81			
10.	BCOTEM	0.636						0.75		
11.	AIDREB	.599						0.76		
8.	SEVDPR	0.637							0.76	
9.	EXPREC	0.535							-0.51	
19.	ATKEMB	0.987								0.99
16.	PROTST	0.266								
21.	NVIOLB	0.440								
PERCENT OF TOTAL VARIANCE			77.34	18.55	13.79	7.18	9.41	8.58	7.38	5.29	7.16

Percent of variation among all the variables involved in the conflict exchange factors, or patterns.

Percent of variation among all conflict variables involved in the particular factors, or patterns.

*For purposes of clarity, only the highest loadings of the 21 conflict variables have been displayed here.

Table 3

Annotated Canonical Structure Matrix*
Chinese Behavior towards the Soviet Union

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Communality: proportion of variation of each dimension of inertia and reciprocity involved in the patterns; sum of squared factor loadings.

Separate patterns of relationships between the dimensions.

Canonical Structure Matrix

Behavioral Dimensions of Inertia and Reciprocity		H²SQR	CANONICAL VARIATES 1	2
INERTIA	Negative Communications	0.471		
	Official Military Violence	0.184		
	Unofficial Violence - Personnel	0.581		
	Warning and Defensive Acts	0.914		
	Unclassified Negative Acts	0.641		
	Boycotts & Embargoes/Aid to Others	0.428		
	Diplomatic Conflict	0.227		
	Unofficial Violence - Embassy	0.591		
RECIPROCITY	Negative Communications	0.726		
	Official Military Violence	0.833	0.716	
	Unofficial Violence - Personnel	0.508		
	Warning and Defensive Acts	0.641		0.629
	Unclassified Negative Acts	0.851		-0.705
	Boycotts & Embargoes/Aid to Others	0.755		-0.662
	Diplomatic Conflict	0.714		-0.419
	Unofficial Violence - Embassy	0.412	-0.404	

Proportion: Percent of variation among all the dimensions involved in the variates.

Loading: degree and direction of relationship of the dimensions with this pattern.

Proportion of Inertia and Reciprocity Dimensions Variance	59.355	7.036	14.251

Trace Correlations: general overlap between the dimensions of inertia and reciprocity and the dimensions of Chinese behavior to the Soviet Union.

Percent of variation among all dimensions involved in the particular variates.

Canonical Correlation	0.659	0.979	0.958

Canonical correlation: the statistical dependence between each matched pair of variates.

Dimensions of Chinese Behavior to the Soviet Union			
Negative Communications	1.000		
Official Military Violence	1.000	0.879	
Unofficial Violence - Personnel	1.000		0.725
Warning and Defensive Acts	1.000		0.836
Unclassified Negative Acts	1.000		
Boycotts & Embargoes/Aid to Others	1.000		0.525
Diplomatic Conflict	1.000		
Unofficial Violence - Embassy	1.000		0.605

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Percent of variation among all the dimensions involved in these variates.

Percent of variation among all dimensions involved in the particular variate.

Proportion of Chinese Behavior Variance	100.000	10.464	26.978

Percent of variation among all the dimensions involved in the variates.

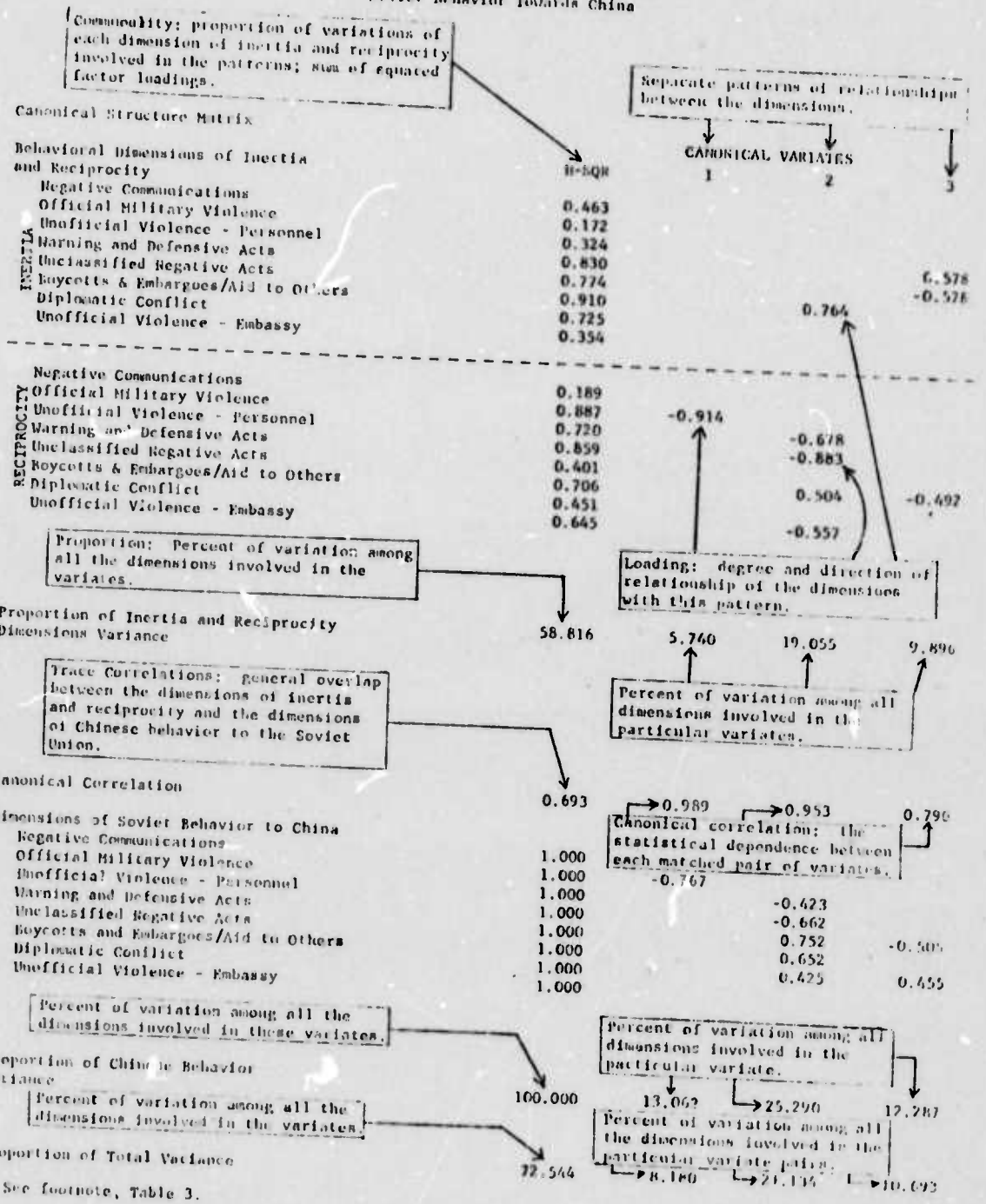
Percent of variation among all the dimensions involved in the particular variate pairs.

Proportion of Total Variance	72.904	8.185	18.493

* For purposes of clarity, only those canonical variate pairs have been displayed here which point to strong relationships between variate pairs, and which are discussed in the text. As such, the sum of the percent of variation for each variate will not equal the percent of variation among all dimensions involved in the variates. Additionally, only the highest loading on the canonical variates have been displayed.

Table 4

Annotated Canonical Structure Matrix*
Soviet Behavior Towards China



* See footnote, Table 3.

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Table 5

Annotated Canonical Structure Matrix*
Chinese Behavior to the United States

Communality: proportion of variations of each dimension of inertia and reciprocity involved in the patterns; sum of squared factor loadings.

Separate patterns of relationships between the dimensions.

Canonical Structure Matrix

Behavioral Dimensions of Inertia and Reciprocity		CANONICAL VARIATES 1	2	3
	H-SQ'd			
INERTIA				
Negative Communications	0.774			
Official Military Violence	0.421			
Unofficial Violence - Personnel	0.530			
Warning and Defensive Acts	0.775	-0.616		
Unclassified Negative Acts	0.547			0.429
Boycotts and Embargoes/Aid to Others	0.802			
Diplomatic Conflict	0.521			-0.641
Unofficial Violence - Embassy	0.589		0.402	-0.250
RECIPROCITY				
Negative Communications	0.647	0.443		
Official Military Violence	0.882			
Unofficial Violence - Personnel	0.561			-0.533
Warning and Defensive Acts	0.489			
Unclassified Negative Acts	0.560			
Boycotts and Embargoes/Aid to Others	0.259			
Diplomatic Conflict	0.530			
Unofficial Violence - Embassy	0.623			

Proportion: Percent of variation among all the dimensions involved in the variates.

Loading: degree and direction of relationship of the dimensions with this pattern.

Proportion of Inertia and Reciprocity Dimensions Variance	59.758	6.701	5.923	10.126

Trace Correlations: general overlap between the dimensions of inertia and reciprocity and the dimensions of Chinese behavior to the Soviet Union.

Percent of variation among all dimensions involved in the particular variates.

Canonical Correlations	0.548	0.858	0.697	0.662

Canonical correlation: the statistical dependence between each matched pair of variates.

Dimensions of Chinese Behavior to the United States				
Negative Communications	1.000	0.661		
Official Military Violence	1.000		-0.618	
Unofficial Violence - Personnel	1.000			-0.667
Warning and Defensive Acts	1.000	-0.648		
Unclassified Negative Acts	1.000	-0.414		
Boycotts and Embargoes/Aid to Others	1.000		0.428	
Diplomatic Conflict	1.000	0.753		
Unofficial Violence - Embassy	1.000			-0.405

Percent of variation among all the dimensions involved in these variates.

Percent of variation among all dimensions involved in the particular variate.

Proportion of Chinese Behavior Variance	100.000	23.075	12.301	14.515

Percent of variation among all the dimensions involved in the variates.

Percent of variation among all the dimensions involved in the particular variate pairs.

Proportion of Total Variance	73.172	12.159	8.049	11.589

* See footnote, Table 3.

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Table 6

Annotated Canonical Structure Matrix*
United States Behavior to the Chinese

Communality: proportion of variations of each dimension of inertia and reciprocity involved in the patterns; sum of squared factor loadings.

Separate patterns of relationships between the dimensions.

Canonical Structure Matrix

Behavioral Dimensions of Inertia and Reciprocity	H-SQR	CANONICAL VARIATES 1	2	3
INERTIA				
Negative Communications	0.705			0.492
Official Military Violence	0.440		0.444	0.428
Unofficial Violence - Personnel	0.817			
Warning and Defense Acts	0.103			
Unclassified Negative Acts	0.908	0.900		
Boycotts and Embargoes/Aid to Others	0.086			
Diplomatic Conflict	0.504	0.501		
Unofficial Violence - Embassy	0.734		0.428	
RECIPROCITY				
Negative Communications	0.562			0.479
Official Military Violence	0.930			0.616
Unofficial Violence - Personnel	0.583		0.704	
Warning and Defensive Acts	0.788			
Unclassified Negative Acts	0.635	0.405	-0.442	
Boycotts and Embargoes/Aid to Others	0.272			
Diplomatic Conflict	0.712			
Unofficial Violence - Embassy	0.673			

Proportion: Percent of variation among all the dimensions involved in the variates.

Loading: degree and direction of relationship of the dimensions with this pattern.

Proportion of Inertia and Reciprocity Dimensions Variance	59.079	10.046	9.047	10.108

Trace Correlations: general overlap between the dimensions of inertia and reciprocity and the dimensions of Chinese behavior to the Soviet Union.

Percent of variation among all dimensions involved in the particular variates.

Canonical Correlations	0.492	0.834	0.668	0.565

Canonical correlation: the statistical dependence between each matched pair of variates.

Dimensions of U.S. Behavior to China				
Negative Communications	1.000	0.826		
Official Military Violence	1.000		0.484	0.835
Unofficial Violence - Personnel	1.000	0.911		
Warning and Defensive Acts	1.000		0.526	
Unclassified Negative Acts	1.000			
Boycotts and Embargoes/Aid to others	1.000			
Diplomatic Conflict	1.000			
Unofficial Violence - Embassy	1.000			-0.416

Percent of variation among all the dimensions involved in these variates.

Percent of variation among all dimensions involved in the particular variate.

Proportion of U.S. Behavior Variance	100.000	27.563	8.835	15.059

Percent of variation among all the dimensions involved in the variates

Percent of variation among all dimensions involved in the particular variate.

Proportion of Total Variance	72.721	15.885	8.977	11.759

* See footnote, Table 3.

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Table 7

Annotated Canonical Structure Matrix
Soviet Behavior to the United States

Communality: proportion of variation of each dimension of inertia and reciprocity involved in the patterns; sum of squared factor loadings.

Separate patterns of relationships between the dimensions.

Canonical Structure Matrix

Behavioral Dimensions of Inertia and Reciprocity	H-SQR	CANONICAL VARIATES 1	2	3	4
Negative Communications	0.772				-0.575
Official Military Violence	0.717	-.0646			
Unofficial Violence - Personnel	0.904		-0.629	0.591	
Warning and Defensive Acts	-0.142				
Unclassified Negative Acts	0.296				
Boycotts and Embargoes/Aid to Others	0.225				
Diplomatic Conflict	0.283				
Unofficial Violence - Embassy	0.413				-0.472
Negative Communications	-0.836		0.636	0.551	
Official Military Violence	0.723		-0.444	-0.584	
Unofficial Violence - Personnel	0.469				
Warning and Defensive Acts	0.989	0.991			
Unclassified Negative Acts	0.622				-0.456
Boycotts and Embargoes/Aid to Others	0.331				
Diplomatic Conflict	0.519				
Unofficial Violence - Embassy	0.211				

Proportion: Percent of variation among all the dimensions involved in the variates

Loading: degree and direction of relationship of the dimensions with this pattern.

Proportion of Inertia and Reciprocity Dimensions Variance	52.834	11.277	7.540	8.231	7.924

Trace Correlation: general overlap between the dimensions of inertia and reciprocity and the dimensions of Chinese behavior to the Soviet Union.

Percent of variation among all dimensions involved in the particular variates.

Canonical Correlations	0.652	0.983	0.847	0.758	0.678

Canonical correlation: the statistical dependence between each matched pair of variates.

Dimensions of Soviet Behavior to the United States					
Negative Communications	1.000		0.438	0.617	
Official Military Violence	1.000		0.677	-0.563	0.423
Unofficial Violence - Personnel	1.000				
Warning and Defensive Acts	1.000	0.894			
Unclassified Negative Acts	1.000				
Boycotts and Embargoes/Aid to Others	1.000			0.419	
Diplomatic Conflict	1.000	0.524			0.717
Unofficial Violence - Embassy	1.000			0.448	

Percent of variation among all the dimensions involved in these variates.

Percent of variation among all dimensions involved in the particular variate.

Proportion of Soviet Behavior Variance	100.000	14.881	11.189	16.310	9.743

Percent of variation among all the dimensions involved in the variates.

Percent of variation among all the dimensions involved in the particular variate pairs.

Proportion of Total Variance	68.556	12.478	8.756	10.924	8.519

* See footnote, Table 7.

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Table 8

Annotated Canonical Structure Matrix
United States Behavior to the Soviet Union

Communality: proportion of variation of each dimension of inertia and reciprocity involved in the patterns; sum of squared factor loadings.

Separate patterns of relationships between the dimensions.

CANONICAL VARIATES

Canonical Structure Matrix	H-SQR	1	2	3	4
Behavioral Dimensions of Inertia and Reciprocity					
INERTIA: Negative Communications	0.682				
INERTIA: Official Military Violence	0.422				
INERTIA: Unofficial Violence - Personnel	0.329				
INERTIA: Warning and Defensive Acts	0.091				
INERTIA: Unclassified Negative Acts	0.765				
INERTIA: Boycotts and Embargoes/Aid to Others	0.464				
INERTIA: Diplomatic Conflict	0.307				
INERTIA: Unofficial Violence - Embassy	0.090				
RECIPROCITY: Negative Communications	0.912		0.604	-0.432	
RECIPROCITY: Official Military Violence	0.593				
RECIPROCITY: Unofficial Violence - Personnel	0.531				
RECIPROCITY: Warning and Defensive Acts	0.975	0.895			
RECIPROCITY: Unclassified Negative Acts	0.454				
RECIPROCITY: Boycotts and Embargoes/Aid to Others	0.484		0.467		-0.487
RECIPROCITY: Diplomatic Conflict	0.737	0.502			0.619
RECIPROCITY: Unofficial Violence - Embassy	0.892				
Proportion of Inertia and Reciprocity Variance	54.548	7.720	7.691	6.358	7.620
Canonical Correlation	0.589	0.983	0.829	0.601	0.556
Dimensions of U.S. Behavior to the Soviet Union					
Negative Communications	1.000		0.846		
Official Military Violence	1.000		-0.681		
Unofficial Violence - Personnel	1.000		-0.406		
Warning and Defensive Acts	1.000	0.994			
Unclassified Negative Acts	1.000				-0.710
Boycotts and Embargoes/Aid to Others	1.000				
Diplomatic Conflict	1.000			-0.430	0.627
Unofficial Violence - Embassy	1.000				
Proportion of U.S. Behavior Variance	100.000	16.044	18.187	5.869	12.333
Proportion of Total Variance	69.699	10.495	11.189	6.195	9.191

Proportion: Percent of variation among all the dimensions involved in the variates.

Loading: degree and direction of relationship of the dimensions with this pattern.

Percent of variation among all dimensions involved in the particular variates.

Trace Correlation: general overlap between the dimensions of inertia and reciprocity and the dimensions of Chinese behavior to the Soviet Union.

Canonical correlation: the statistical dependence between each matched pair of variates.

Percent of variation among all dimensions involved in the particular variate pairs.

Percent of variation among all the dimensions involved in these variates.

Percent of variation among all the dimensions involved in the particular variate pairs.

Percent of variation among all the dimensions involved in the variates.

* See footnote, Table 3.

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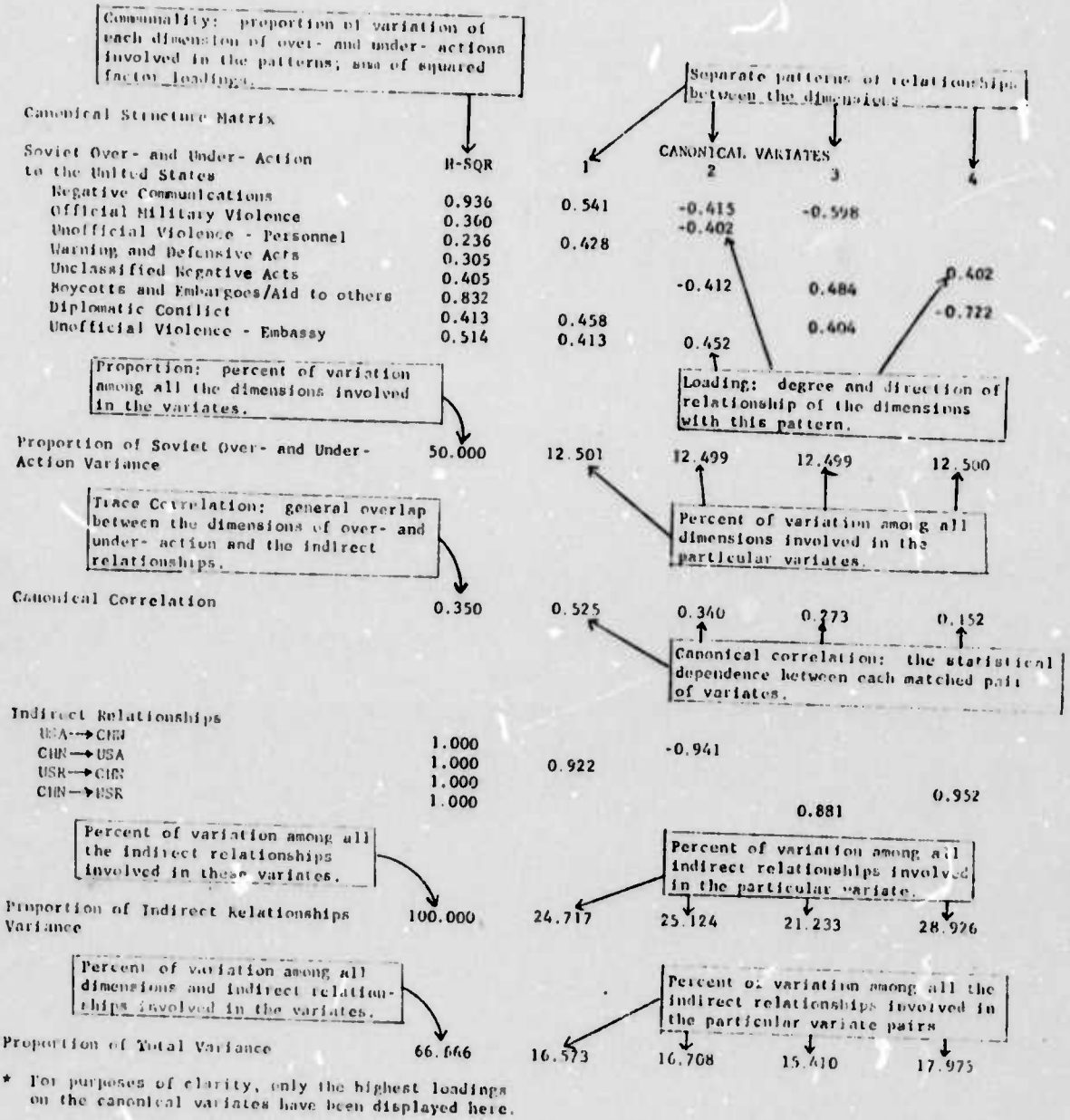
Table 9

Annotated Canonical Structure Matrix*
Soviet Over- and Under- Action to the United States



* For purposes of clarity, only the highest loadings on the canonical variates have been displayed here.

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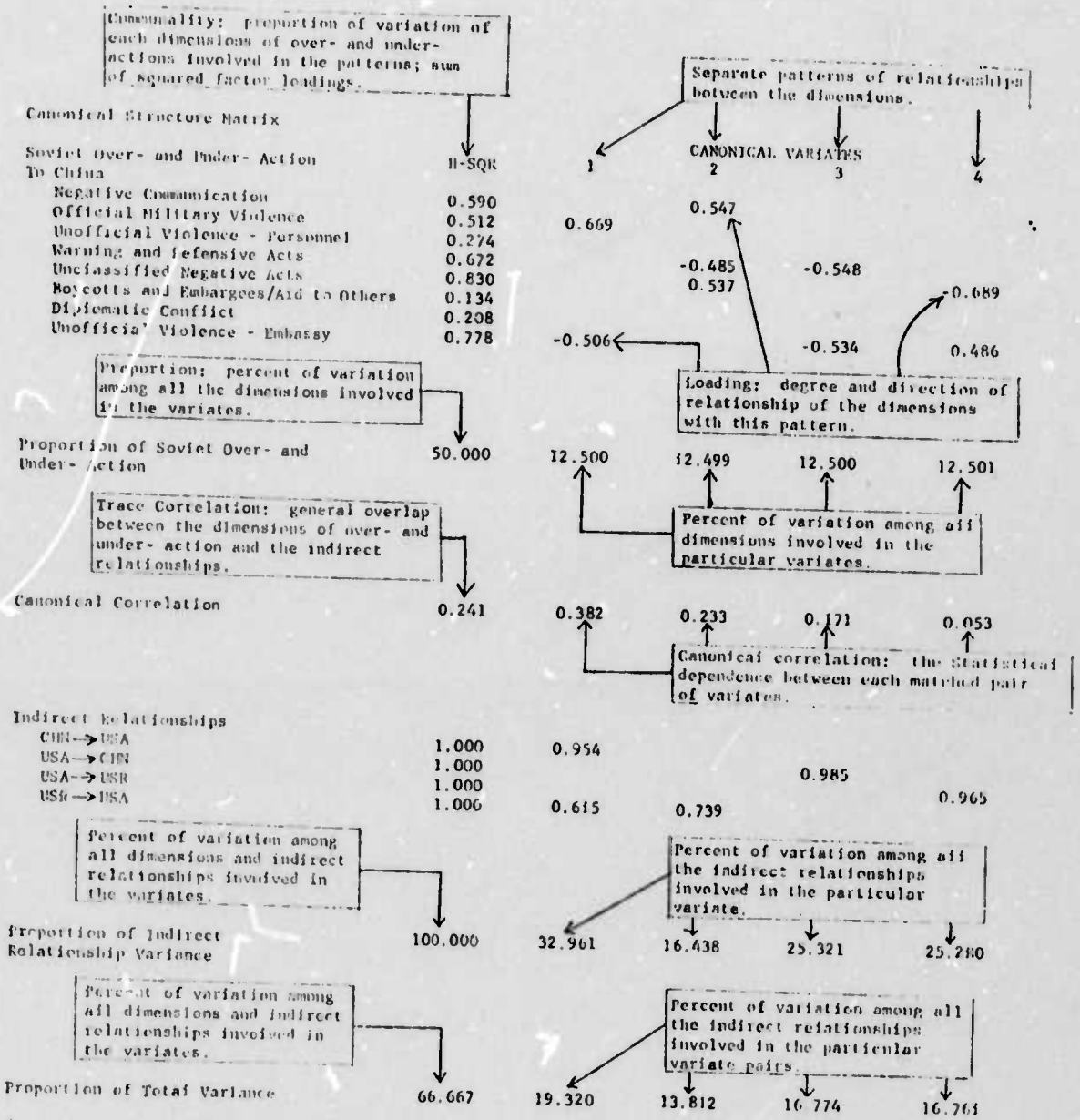
Table 10

Annotated Canonical Structure Matrix*
Soviet Over- and Under- Action to the Chinese



* For purposes of clarity, only the highest loadings on the canonical variates have been displayed here.

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Table 11

Annotated Canonical Structure Matrix*
Chinese Over- and Under- Action to the United States

Communality: proportion of variation of each dimension of over- and under- action involved in the patterns; sum of squared factor loadings.

Canonical Structure Matrix

Chinese Over- and Under- Action to the United States	H-SQR	CANONICAL VARIATES 1	2	3	4
Negative Communications	0.183				
Official Military Violence	0.232				
Unofficial Violence - Personnel	0.835		0.490	-0.637	
Warning and Defensive Acts	0.060				
Unclassified Negative Acts	0.732				-0.821
Boycotts and Embargoes/Aid to Others	0.416	0.559			
Diplomatic Conflict	0.889	0.487	0.734		
Unofficial Violence	0.653	-0.497		0.598	

Separate patterns of relationships between the dimensions

Loading: degree and direction of relationship of the dimensions with this pattern.

Proportion: percent of variation among all the dimensions involved in the variates.

Proportion of Chinese Over- and Under- Action Variance	50.000	12.500	12.501	12.499	12.500

Percent of variation among all dimensions involved in the particular variates.

Trace Correlation: general overlap between the dimensions of over- and under- action and the indirect relationships.

Canonical Correlation	0.399	0.551	0.481	0.310	0.081

Canonical correlation: the statistical dependence between each matched pair of variates.

Indirect Relationships					
CHN → USR	1.000	-0.768	0.491		
USR → CHN	1.000		0.898		
USA → USR	1.000	-0.528		0.412	
USR → USA	1.000			0.751	
				0.444	0.886

Percent of variation among all the indirect relationships involved in these variates.

Percent of variation among all indirect relationships involved in the particular variate.

Proportion of Indirect Relationships Variance	100.000	21.946	29.035	25.146	23.873

Percent of variation among all dimensions and indirect relationships involved in the variates.

Percent of variation among all the indirect relationships involved in the particular variate pairs

Proportion of Total Variance	66.667	15.649	18.012	16.715	16.291

* For purposes of clarity, only the highest loadings on the canonical variates have been displayed here.

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Table 12

Annotated Canonical Structure Matrix*
Chinese Over- and Under- Action to the Soviet Union

Communality: proportion of variation of each dimension of over- and under-actions involved in the patterns; sum of squared factor loadings.

Separate patterns of relationships between the dimensions.

Canonical Structure Matrix

Chinese Over- and Under- Action to the Soviet Union.	H-SQR	CANONICAL VARIATES 1	2	3	4
Negative Communications	0.238				
Official Military Violence	0.780		-0.671	-0.558	
Unofficial Violence - Personnel	0.559	0.404		0.463	-0.424
Warning and Defensive Acts	0.481	0.593			
Unclassified Negative Acts	0.684		0.500	-0.641	
Boycotts and Embargoes/Aid to Others	0.689				-0.756
Diplomatic Conflict	0.125				
Unofficial Violence - Embassy	0.444	0.582			

Proportion: percent of variation among all the dimensions involved in the variates.

Loading: degree and direction of relationship of the dimensions with this pattern.

Proportion of Chinese Over- and Under-Action Variance.	49.998	12.500	12.498	12.500	12.500

Trace Correlation: general overlap between the dimensions of over- and under- action and the indirect relationships.

Percent of variation among all dimensions involved in the particular variates.

Canonical Correlation	0.265	0.347	0.278	0.255	0.191

Canonical Correlation: the statistical dependence between each matched pair of variates.

Indirect Relationships					
CHN→USA	1.000	0.821	-0.518		
USA→CHN	1.000	0.554		0.825	
USA→USR	1.000				0.966
USR→USA	1.000		-0.897		

Percent of variation among all the indirect relationships involved in those variates.

Percent of variation among all indirect relationships involved in the particular variate.

Proportion of Indirect Relationships Variance	100.000	24.917	27.010	22.224	25.849

Percent of variation among all dimensions and indirect relationships involved in the variates.

Percent of variation among all the indirect relationships involved in the particular variate pairs.

Proportion of Total Variance	66.666	16.639	17.335	15.741	16.950

* For the purposes of clarity, only the highest loadings on the canonical variates have been displayed here.

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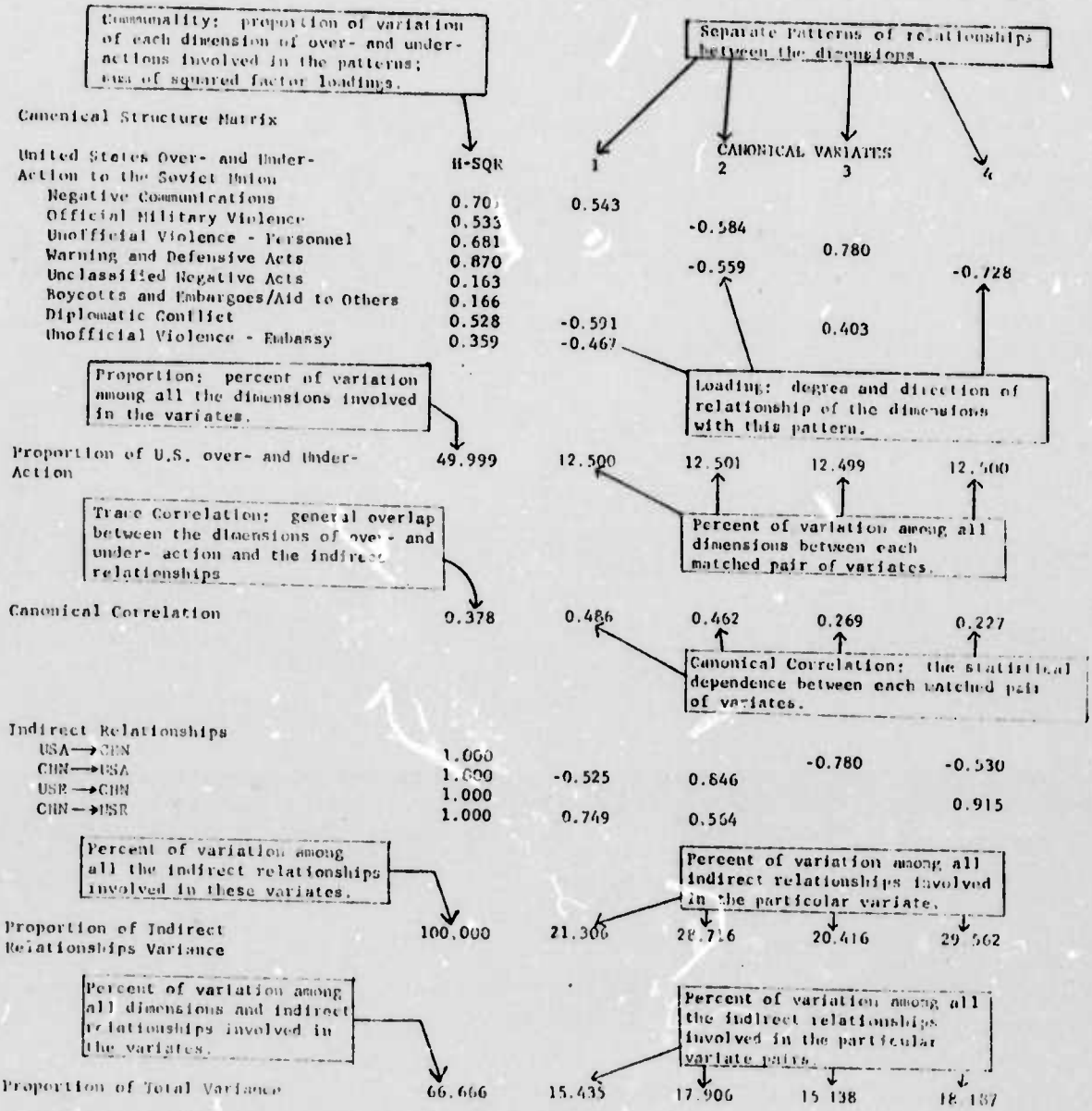
Table 13

Annotated Canonical Structure Matrix*
U.S. Over- and Under- Action to the Soviet Union



* For the purposes of clarity, only the highest loadings on the canonical variates have been displayed here.

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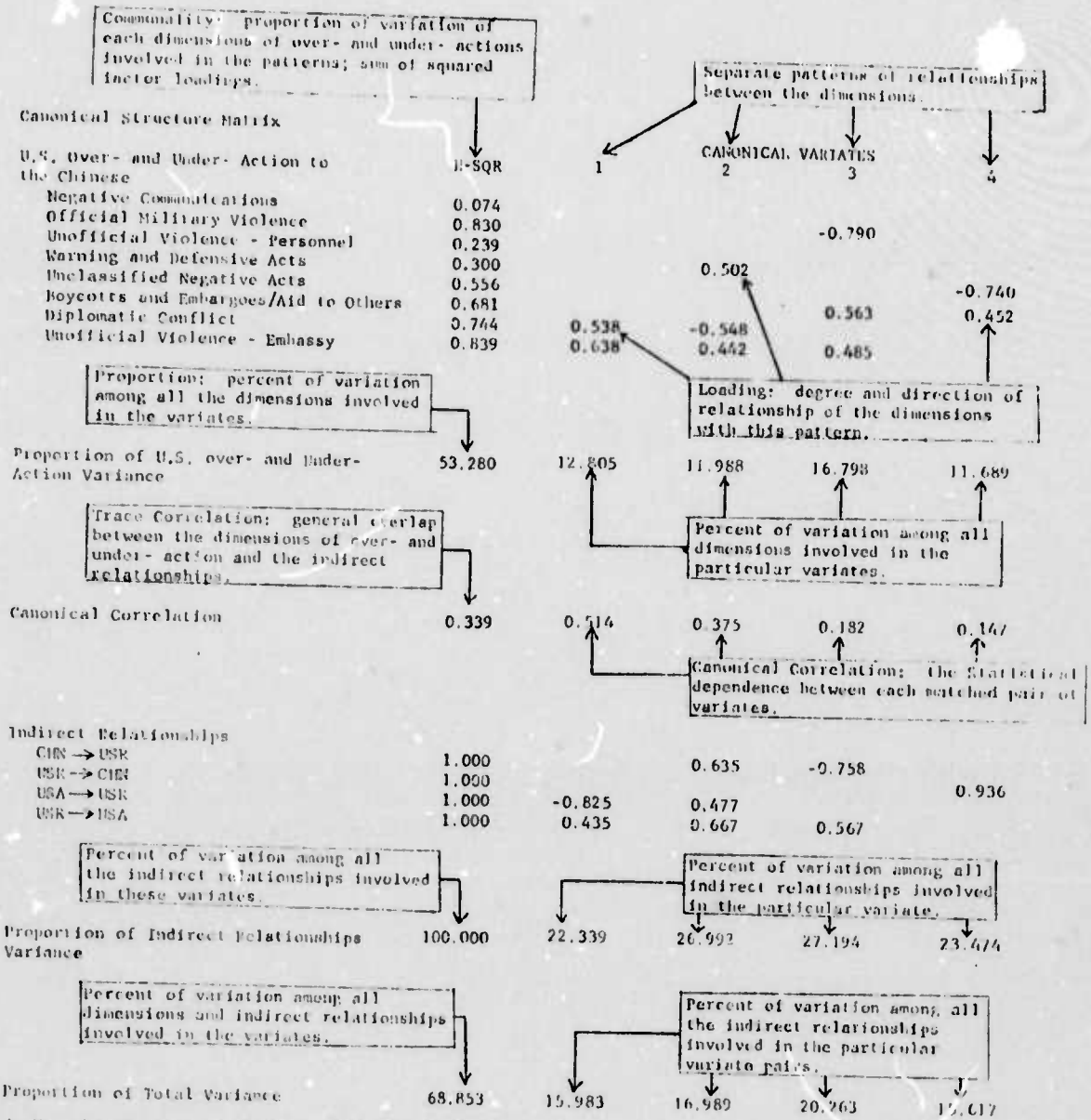
Table 14

Annotated Canonical Structure Matrix*
U. S. Over- and Under- Action to the Chinese



* For the purposes of clarity, only the highest loadings on the canonical variates have been displayed here.

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Table 15
Summary of Amount of Variation Explained

Direct and Indirect Effects	CHN USR	CHN USA	USR CHN	USR USA	USA CHN	USA USR
Inertia & Reciprocity	43.4	30.0	48.0	42.5	24.2	34.7
CHN USA & USA CHN	7.1					
USA USR & USR USA	7.1					
CHN USR & USA USR		8.8				
CHN USR & USR CHN		8.8				
CHN USA & USR USA			6.5			
CHN USA				7.2		
USA CHN				7.2		
USA USR					9.7	
CHN USR & USR USA					12.7	
CHN USA & CHN USR						8.2
CHN USA & CHN USR						8.2
Total	57.6	47.6	54.5	56.9	46.6	51.1